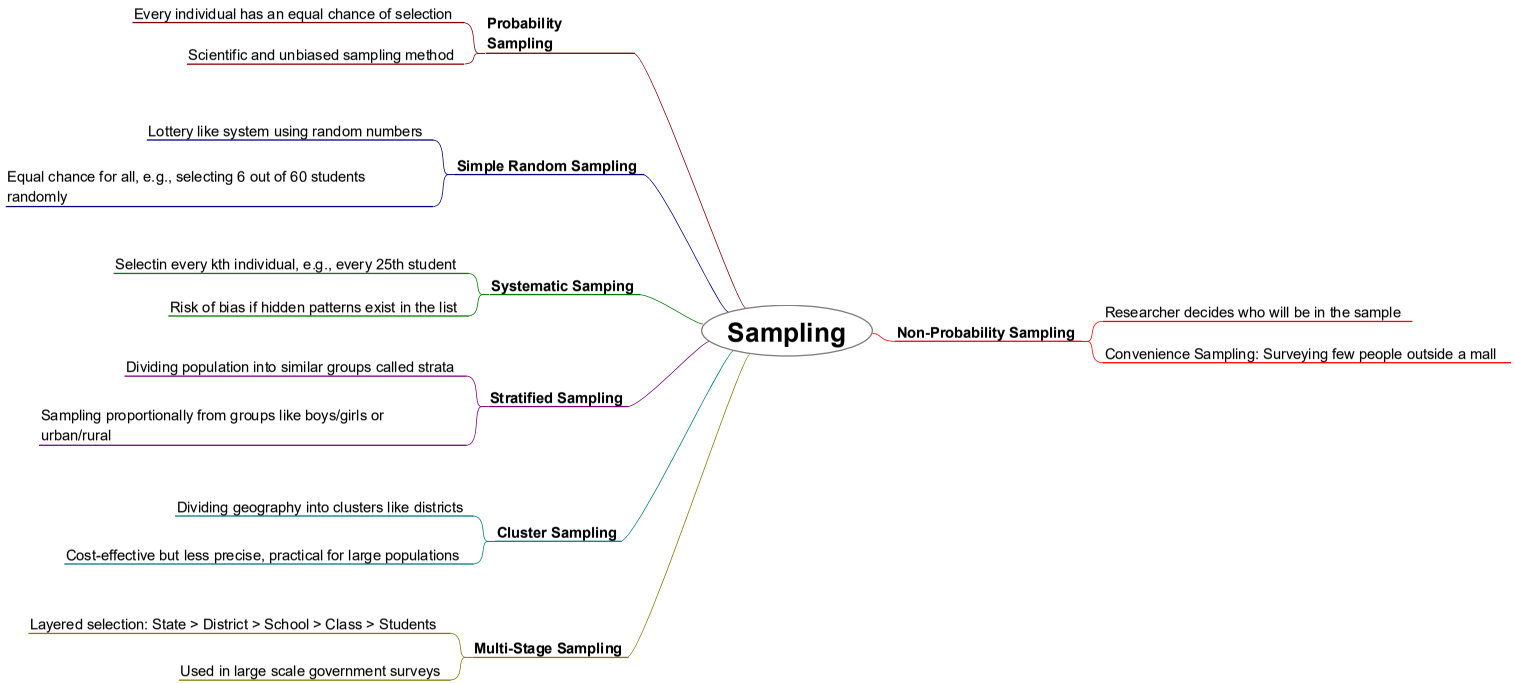
Sampling
Probability Sampling
Every individual has an equal chance of selection
Scientific and unbiased sampling method
Simple Random Sampling
Lottery like system using random numbers
Equal chance for all, e.g., selecting 6 out of 60 students randomly
Systematic Samping
Selectin every kth individual, e.g., every 25th student
Risk of bias if hidden patterns exist in the list
Stratified Sampling
Dividing population into similar groups called strata
Sampling proportionally from groups like boys/girls or urban/rural
Cluster Sampling
Dividing geography into clusters like districts
Cost-effective but less precise, practical for large populations
Multi-Stage Sampling
Layered selection: State > District > School > Class > Students
Used in large scale government surveys
Non-Probability Sampling
Researcher decides who will be in the sample
Convenience Sampling: Surveying few people outside a mall